AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Withdrawn) A magnetic disk glass substrate for use in a hard disk drive and having a disk thickness of less than 0.5 mm and mirror-finished and chemically-strengthened main surfaces, the glass substrate comprising:

compressive stress layers formed at the main surfaces; and

a tensile stress layer formed between the compressive stress layers,

wherein a product of a thickness of the tensile stress layer and a maximum tensile stress of the tensile stress layer falls within a range of 0.4 to 2.0 kg/mm, so that the magnetic disk glass substrate has a impact resistance of 3000 G or more and the main surface of the magnetic disk glass substrate has a waviness (Wa) of 1.0 nm or less, and

wherein the thickness of the tensile stress layer is measured by observing a longitudinal section of the magnetic disk glass substrate with a Babinet compensator.

2. - 3. (Cancelled).

4. (Withdrawn) The magnetic disk glass substrate according to Claim 1, wherein:

a predetermined disk thickness is set by lapping the main surfaces, and

the mirror-finished surfaces are formed with no cracks by polishing the main surfaces.

5. (Withdrawn) The magnetic disk glass substrate according to claim 1, wherein:

a thickness of the tensile stress layer is 0.4 mm or less, and

a maximum tensile stress of the tensile stress layer is 10 kg/mm2 or less.

6. (Withdrawn) The magnetic disk glass substrate according to claim 1, wherein:

a total thickness of the compressive stress layer at one main surface and the compressive stress layer at the other main surface is at least 40% of the disk thickness.

7. (Withdrawn) The magnetic disk glass substrate according to claim 6, wherein:

a maximum tensile stress of the tensile stress layer is 10 kg/mm2 or less.

8. (Withdrawn) The magnetic disk glass substrate according to claim 1, wherein:

a highest compressive stress in the compressive stress layers is 4 kg/mm2 or more.

9. (Withdrawn) The magnetic disk glass substrate according to claim 1, wherein:

the magnetic disk glass substrate is used for a magnetic disk installed in a hard disk drive that starts and stops operation by a load/unload system.

10. (Withdrawn) A magnetic disk comprising:

the magnetic disk glass substrate according to claim 1, and

a magnetic layer formed on the magnetic disk glass substrate.

11. (Currently Amended) A method for manufacturing a magnetic disk glass substrate for use in a hard disk drive ~~and having a disk thickness of less than 0.5 mm and mirror-finished main surfaces~~, the glass substrate comprising:

compressive stress layers formed at the main surfaces; and

a tensile stress layer formed between the compressive stress layers,

~~wherein a product of a thickness of the tensile stress layer and a maximum tensile stress of the tensile stress layer is set at a predetermined value, so that the magnetic disk glass substrate has a predetermined impact resistance and the main surface of the magnetic disk glass substrate has a predetermined waviness (Wa), and~~

~~wherein the thickness of the tensile stress layer is measured by observing a longitudinal section of the magnetic disk glass substrate with a Babinet compensator~~, the method comprising the steps of:

chemically strengthening the glass substrate;

bringing the glass substrate into contact with a melted mixture of at least three alkali metal nitrates in the chemical strengthening step;

forming the compressive stress layers at both main surfaces of the glass substrate by an ion exchange; and

forming the tensile stress layer between the compressive stress layers,

wherein the melted mixture of at least three alkali metal nitrates contains 0.001% to 0.3% by volume of a nitrate of alkali metal having a smallest ion radius among the alkali metal nitrates.

wherein the magnetic disk glass substrate has a disk thickness of less than 0.5 mm and mirror-finished main surfaces,

wherein a product of a thickness of the tensile stress layer and a maximum tensile stress of the tensile stress layer is set at a predetermined value, so that the magnetic disk glass substrate has a impact resistance of 3000 G or more and the main surface of the magnetic disk glass substrate has a waviness (Wa) of 1.0 nm or less, and

wherein the thickness of the tensile stress layer is measured by observing a longitudinal section of the magnetic disk glass substrate with a Babinet compensator.

12. (Original) The method for manufacturing the magnetic disk glass substrate according to claim 11, further comprising the step:

polishing the glass substrate;

wherein in the glass substrate polishing step, an abrasive cloth and the glass substrate is relatively moved while colloidal silica abrasive grain or diamond abrasive grain is fed, thereby removing cracks in the main surfaces of the glass substrate to form mirror-finished surfaces.

13. (Original) The method for manufacturing the magnetic disk glass substrate, according to claim 12, wherein:

the mirror-finished surfaces have an arithmetic mean roughness (Ra) of 0.4 nm or less in the glass substrate polishing step.

14. (Previously Presented) A method for manufacturing a magnetic disk, comprising the step:

forming at least a magnetic layer on a compressive stress layer formed on at least one main surface of the magnetic disk glass substrate manufactured by the method according to claim 11.

15. (Previously Presented) The method for manufacturing the magnetic disk glass substrate according to claim 11, wherein the three alkali metal nitrates comprises potassium nitrate, sodium nitrate and lithium nitrate, and

the nitrate of the alkali metal having the smallest ion radius is the lithium nitrate.

16. (Previously Presented) The method for manufacturing the magnetic disk glass substrate according to claim 15, wherein a content of the lithium is 10 to 3000 ppm.

17. (Previously Presented) The method for manufacturing the magnetic disk glass substrate according to claim 16, wherein the glass substrate is aluminosilicate glass containing lithium.